WHAT IS CLAIMED IS:

- 1. An improved method of treating B cell lymphoma which comprises administration of a therapeutic anti-CD20 antibody, wherein the improvement comprises administering at least one chemotherapeutic agent.
- 2. The method of Claim 1, wherein the antibody is a chimeric anti-CD20 antibody.
- 3. The method of Claim 1, wherein the chimeric antibody is C2B8.
- 4. The method of Claim 1, wherein the at least one chemotherapeutic agent is administered prior to antibody administration.
- 5. The method of Claim 1, wherein the at least one chemotherapeutic agent is administered simultaneous to antibody administration.
- 6. The method of Claim 1, wherein the at least one chemotherapeutic agent is administered after antibody administration.

- 7. The method of Claim 1, wherein the at least one chemotherapeutic agent is selected from the group consisting of cyclophosphamide, doxorubicin, vincristine, prednisone and mixtures thereof.
- 8. The method of Claim 7, wherein the at least one chemotherapeutic agent comprises a mixture of cyclophosphamide, doxorubicin, vincristine and prednisone, and the antibody is C2B8 or another anti-CD20 antibody that results in substantial depletion of peripheral B cells.
- 9. The method of Claim 8, wherein the antibody provides for nearly total peripheral blood B cell depletion within about 24 hours after administration.
- 10. The method of Claim 9, wherein the antibody dosage ranges from between about 0.4 and about 20 mg/kg body weight.

and c'